

Impacts of Food Processing Industry on Economic Growth, FDI and Exports of India

S. Anshu Verma

Assistant Professor, Guru Nanak
Dev University, Gurgaon, Jalandhar,
Punjab, 140015

Professor, Punjab School of
Economics, Guru Nanak
Dev University, Amritsar,
Punjab, 140015

Abstract

At the time of India's Independence, the most crucial issue was that of development. The conception of both economists and policy makers regarding the role of agriculture and industry in economic development has undergone an important evolution. Now, both are regarded as an active and co-equal partners in the process of economic development. With the passage of time, India's agriculture has been transformed from subsistence level to commercial level. India's rich agricultural base has potential to add significant value to the food processing sector. Food Processing Industries are given high priority in India because of their great linkages in the development of many interrelated variables. The significance of food industries lies in the fact that they create employment opportunities, mobilize investible resources from rural sector, promote agricultural production, make use of local resources, add value to the farm products, improve quality, achieve efficient marketing, combat rural-urban migration and promote industrialization in an agricultural economy. The availability of raw material, changing life style and relaxation in regulatory policies is fuelling the growth of this sector. Food processing industry is widely recognized as a "Sunrise Industry" in India having huge potential for uplifting agricultural economy. In this paper, an attempt has been made to bring out developmental experience of India in relation to the food processing industry. The objective of this paper is to analyze the contribution of FPI sector in the GDP of India. The inflow of FDI in the food processing industry for the year 2000-01 to 2013-14 and export competitiveness of FPI sector for the year 2006-07 to 2012-13 has also been analyzed. In the end, the paper suggests some policy measures to enhance the global competitiveness of Indian food industry, to facilitate exports and to increase the inflows of FDI to develop India as a food processing hub and link it to the global production network.

Keywords:

Economic Development, FDI, Food Processing Industry.

Introduction

Food processing is one of the first industries developed by man. Most agricultural commodities require some sort of processing for them to be edible. In primitive societies man processed his own food using the simple mortar and pestle. With the advent of industrialization there

emerged important implications for food processing technologies. The increasing demand of processed food in urban as well as rural areas encouraged the establishment of processing plants. Food processing, therefore, began to occupy a fairly predominant position in the overall industrial sector. Its importance was highlighted by its strong backward and forward linkages with rest of the economy (Battese et al., 1993). The food processing industry in India is of fundamental importance, holding as it does the vital link between numbers of other variable such as growth of agriculture, employment, investment, GDP etc. The industry has played an important role in contributing to socio-economic development in many countries, especially in case of India.

In case of India, the agricultural and non-agricultural sectors are closely linked with each other. Hence, the growth in one sector will induce growth in the other and vice versa. Among many strands of literature, there is a consensus that agriculture has strong linkages and a large growth multiplier with other sectors, especially with food processing sector. Food processing is where business meets agriculture. Agro-processing being a crucial linkage between the large unorganized agriculture on the one hand and the formal industrial sector on the other hand can be seen as a way to integrate farming with processing to enhance farm incomes (Ghosh et al., 2013). During the industrialization, when agriculture accounts for 50 percent or more of gross domestic product in developing economy, these food industries provide a sound basis for industrial development since they not only reduce agricultural output wastage, but also create time, place and form utilities into the product by way of processing.

A strong and dynamic food processing sector plays an important role in diversification of agricultural activities, improving value addition opportunities and creating surplus for export of agro-food products (Merchant, 2008). Among various agro industries, food processing industries are more material incentive, and thus, process a greater potential to revitalize agricultural growth by strengthening forward and backward linkages with farmers, and speed up the process of commercialization and diversification of agricultural production (Sarkar and Karan, 2005). Food processing accounts for about 14% manufacturing GDP, i.e. Rs. 2,80,000 crore, and employs about 13 million directly and 35 million people indirectly. The food industry of India provides nearly 60% of all job opportunities by directly employing around 1.6 million workers. Also, it is the fifth largest industry in the country in terms of production, consumption, export and growth. The worth of the Indian processed food sector stood at USD 157 billion in FY 2012, it is expected to touch USD 225 billion by FY 2016 with 13% growth rate per annum. (GOI, MOFPI, 2011). Also, the processed foods can be promising item in the exports from

the developing countries and thus, it may help in saving and earning foreign exchange. Trade in high value products is increasingly displacing exports of traditional commodities such as rice, sugar, tea, coffee, tobacco, etc. Thus, during the 2000s, the growth rate in value of exports of rice, sugar, marine products, tea, etc. declined while high value exports (fruits and vegetables, floriculture, meat, processed fruit juices) grew about 18 per cent annually. Ravi and Roy (2006) projected the processed foods to rise to 15 per cent by 2020.

Food Processing Industry of India: At a glance

In the post-independence period, India witnessed rapid growth in food processing sector specifically during 1980s. It followed the first phase of the Green Revolution that had resulted in increased agricultural production and the need for its post-harvest management. The importance of the sector was realized by the business community leading to diversification from grain trading to processing. Now a days, Food processing industry is widely recognized as a “Sunrise Industry” in India having huge potential for uplifting agricultural economy, cultivation of large scale processed food manufacturing and food chain facilities, and the resultant generation of employment and export earnings. A shift is taking place in global trade in agricultural products, away from traditional towards processed food products. Thus, the food processing industry is one of the largest industries in India and ranks fifth in size. The Indian food processing industry has an estimated size of \$70 billion (Ministry of Food Processing, Government of India, 2012).

This Industry is supported by the agriculture sector, which is a significant economic component, employing nearly 60% of the country's population and contributing to around 25% of India's Gross Domestic Product. With access to large natural resources base of 161 million hectares of arable land, 15 million hectares of fresh water reservoirs, the largest livestock population in the globe and diverse agro-climatic conditions, India is a favorable destination for growth in the food Industry, according to FICCI (2007).

Within the last two decades, a revolutionary change has taken place in this area and indeed the process of this change is continuing to accelerate rapidly and processed foods have become the 'IN' thing of today for the households, the retailers and the entrepreneurs including large business houses and multinationals (Puri and Tajinder, 1987). Food processing industry is of enormous significance for India's development because of the vital linkages and synergies that it promotes between two pillars of the economy, namely agriculture and industry. Essentially, the food industry involves the commercial movement of food from field to work. Also, the Indian food industry is primarily export oriented. In this context, there are massive opportunities for export oriented processed foods for medium scale

entrepreneurs. India's agricultural processed foods exports are US \$18.65 billion during 2012-13 (Asha, 2013). Favorable factors like lower average age, higher levels of disposable income and increasing working couples have contributed to the success of this sector.

Data and Methodology

This paper has reviewed the relevant literature and analyzed secondary data available on food processing sector. The other data sources are from National Sample Survey of Industries (NSSO), Annual Survey of Industries (ASI) reports, Ministry of Food Processing Industry (MOFPI) strategic plan and others. The data regarding the Foreign Direct Investment (FDI) in food processing sector has been taken from Department of Industrial Policy and Promotion (DIPP), Ministry of Commerce. The data of exports of processed and food items has been taken from DGIC&S, Kolkata, Ministry of Commerce and Industry.

Main Objectives of the paper are:

- To examine the contribution of FPI sector in National

Income i.e GDP.

- To study the inflow of FDI in food processing sector, and
- To study the Exports Structure of processed foods by FPI sector.
- To provide some policy implications.

The paper is divided into three sections. The section I of the paper focuses on the contribution of FPI sector in the GDP of India. The section II analyzes the inflow of FDI in the food processing industry for the year 2000-01 to 2013-14 and export competitiveness of FPI sector for the year 2006-07 to 2012-13 has been analyzed in section III of the paper. The paper also gives some policy implications in the end.

The ASI and NSSO data is classified into NIC groups based on International standard Industrial Classification and it has been assumed that the factories listed in the following groups can be summed up to constitute food processing industries.

Table 1: Description of Food Processing Industries.

Sr. No	NIC Group	Description
1	151	Production, processing and preservation of meat, fish, fruits, vegetables, oils and fats.
2	152	Manufacturing of dairy products
3	153	Manufacturing of Grain Mill products, Starches and Starch products & prepared animal feeds.
4	154	Manufacture of other food products
5	155	Manufacture of Beverages

The above group also include food products which are under the mandate of Ministries other than Ministry of food processing industries.

Section I

Contribution of FPI in the growth of GDP

The Indian food processing industry is of great economic significance for the development of Indian economy because it creates vital linkages between the agriculture and the industry. Domestically, the spending on food and food products amounts to nearly 21% of the Gross Domestic Product (GDP) of the country and constitutes the largest portion of the Indian consumer spending more than a 31% share of wallet. Going forward, the Indian domestic food

market is expected to grow by nearly 40% of the current market size by 2015, to touch USD 258 billion by 2015 (FICCI, 2010). The Agriculture sector has 26% contribution towards the GDP of our country. The growth potential of India's food industry is quite significant in terms of its value added. India is the world's third largest food producer with the potential of becoming the number one during the next couple of years (Behera, 2009). Adding value to the farm products and other material ingredients is the way in which the food processing industries contribute to state and national economies. The sum of value added of

each company is the value added of an industry; the sum of the value added of all industries approximates the national economy's Gross Domestic Product (GDP). National Accounts Statistics is also using the NIC groups to report the contribution of food processing industry to GDP for each

group (mentioned above). Here, the 151-155 NIC groups as mentioned above are added to derive the contribution of food processing sector. Following table clearly shows the contribution of food processing industry in the GDP of India.

Table 2: Contribution of FPI to GDP

Sr. No	GDP (Overall, Agri, Manf, FPI)	Contribution of FPI to GDP at 2004-05 Prices (In Rs. Crore)							
		2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12
	GDP at Factor Cost, Of which	2,971,464	3,253,073	3,564,364	3,896,636	4,158,676	4,516,071	4,937,006	5,243,582
1	GDP Agriculture*	503,786	531,745	554,395	589,383	588,757	592,110	643,111	667,446
2	GDP Manufacturing	453,225	499,021	570,458	629,073	656,302	730,435	801,477	823,023
3	GDP-FPI	44,355	47,689	52,161	57,320	60,378	58,752	67,508	78,094
4	GDP-Industry	829,783	953,872	1,140,197	1,330,270	1,500,254	1,695,796	2,003,304	2,233,183
	GROWTH (%)								
4	GDP at Factor Cost		9.5	9.6	9.3	6.7	8.6	9.3	6.2
5	GDP Agriculture*		5.5	4.3	6.3	-0.1	0.6	8.6	3.8
6	GDP Manufacturing		10.1	14.3	10.3	4.3	11.3	9.7	2.7
7	GDP-FPI		7.5	9.4	9.9	5.3	-2.7	14.9	15.7
	SHARE OF FPI IN GDP (%)								
8	GDP FPI as a share of GDP in Agriculture*	8.8	9.0	9.4	9.7	10.3	9.9	10.5	11.7
9	GDP FPI as a share of GDP in Manufacturing	9.8	9.6	9.1	9.1	9.2	8.0	8.4	9.5
10	GDP FPI as a share of GDP-Industry	5.3	5.0	4.6	4.3	4.0	3.5	3.4	3.5
11	GDP FPI as a share of GDP	1.5	1.5	1.5	1.5	1.5	1.3	1.4	1.5

GDP-FPI: REG & UNREG		2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12
1	GDP-FPI Registered	22,148	26,780	30,709	34,753	39,253	37,813	45,042	51,877
2	GDP-FPI Unregistered	22,207	20,910	21,453	22,568	21,125	20,939	22,467	26,217
3	GDP-FPI	44,355	47,689	52,161	57,320	60,378	58,752	67,508	78,094
SHARE OF REG & UNREG FPI (%)									
1	Share of Regd FPI	49.9	56.2	58.9	60.6	65.0	64.4	66.7	66.4
2	Share of UnRegd FPI	50.1	43.8	41.1	39.4	35.0	35.6	33.3	33.6
Source: National Accounts Statistics		-2013; * Excludes Forestry & Logging							
GDP: Sum of GVA (value of output less the value of input used up in the process of production) of all resident producer units of the economy during the reference period.									

Performance of this sector has improved significantly in the recent years. Table 2 clearly shows the increasing growth of food processing sector and its contribution to the GDP of India. The GDP at factor cost of agriculture, manufacturing and FPI (Food Processing Industries) consistently increased in all years from 2004-05 to 2011-12. However, the growth of FPI in GDP varied from 9.4 percent in 2006-07 to -2.7 percent in 2009-10 but then again rose to 14.9 per cent and 15.7 percent in year 2010-11 and 2011-12 respectively. Table 2 also indicates the share of registered and unregistered FPI in the GDP. The percentage share of unregistered FPI has undergone a significant downfall from 50.1 per cent in 2004-05 to 33.6 percent in 2011-12 whereas the share of registered FPI has increased from 49.9 per cent to 66.4 per cent in 2011-12. Thus, the food industries related to agricultural produce have added great value to the national wealth.

Growth of FDI in Food Processing Industry of India

In his review of the FDI literature, Gopinath (2000) identifies three schools of thought. The first, based on Bhagwati's "immiserizing growth" thesis, stresses the lock-in consequences of tariff-induced FDI in small countries where cheap labour becomes combined with the increasing import of capital intensive components and equipment. In these cases, Athukorala and Sen (1998) have argued that food processing would be one of the lesser affected sectors to the extent that it has a lower dependence on imports. This, however, may be the case for processed food exports only. The industrial policy reforms 1991 and further amendments during the nineties opened opportunities for foreign investment in India (Rastogi and Sawhney, 2013). But only the few sectors of India could attract more investment while the many other sectors were lagging behind for attracting foreign investment. However, the food processing sector is

one, which has attracted the FDI. The initiation of economic reforms in mid-1991, aimed at improving the economic situation of the country, have resulted in progressive reduction in barriers to capital flows and increase in international trade, spread of market based economies in key sectors specially in food processing sector and the exciting possibilities of beneficial change brought by transformative technologies, which have opened up many opportunities to entrepreneurs and accelerated the process of wealth creation (Desai, 2003).

Foreign direct investment refers to the capital inflow from abroad that are invested in or to enhance the production capacity of the economy. However, many mechanisms and dynamics of FDI- assisted development have changed. Foreign direct investment seems as an important catalyst for economic growth in developing country (Gola, et.al, 2013). Foreign investment inflows are supplementing the scarcity of domestic investment in food processing sector particularly in India. Automatic approval is granted for foreign investment up to 51% in high priority industries which include all food processing industries (except milk food, malted foods and flour) and all items of packaging for food processing industries. Saravanan and Mohansundaram (2013), in their research paper examined the trend of public expenditure on FPI and analyzed the employment potential and progress of FDI in FPI. The Authors observed that India has experienced an acute shortage of capital and thus the purpose of FPI in Indian Industries is heartily welcomed. The Authors revealed that the government also has increased its plan outlay for the development of FPI in the country which results in the actual expenditure from Rs. 80 crores in 2004-2005 to Rs 353 crores in 2011-2012. As regard to employment aspect, the authors found out that employment in FPI in organized sector has increased from 13.46 lakhs in 1998-99 to 15.05 lakhs in 2007-2008.

Table 3: Financial Year Wise FDI Equity Inflows from April 2000 to March 2014

Sr. No	Year (Apr - Mar)	Annual Figures					Share of FPI in Total FDI: Annual (US \$ Million)
		FDI in FPI: Annual		FDI Total: Annual			
		FDI (Rs crore)	FDI (US\$ million)	FDI (Rs crore)	FDI (US\$ million)		
1	2000-01	198.13	45.75	10,733	2,463	1.86	
2	2001-02	1,036.12	219.39	18,654	4,065	5.40	
3	2002-03	176.53	36.88	12,871	2,705	1.36	
4	2003-04	502.39	109.22	10,064	2,188	4.99	
5	2004-05	201.32	43.98	14,653	3,219	1.37	
6	2005-06	182.93	41.74	24,584	5,540	0.75	
7	2006-07	457.28	102.00	56,390	12,492	0.82	
8	2007-08	279.01	70.17	98,642	24,575	0.29	
9	2008-09	455.59	102.71	142,829	31,396	0.33	
10	2009-10	1,314.23	278.89	123,120	25,834	1.08	
11	2010-11	858.03	188.67	97,320	21,383	0.88	
12	2011-12	826.16	170.21	165,146	35,121	0.48	
13	2012-13	2,193.65	401.46	121,907	22,423	1.79	
14	2013-14	25,106.78	3,982.88	147,518	24,299	16.39	

Source: DIPP, Ministry of Commerce

The impact of FDI on food processing industry is very important for a country like India. Table 3 indicates the inflow of Foreign Direct Investment (FDI) in food processing sector. The inflow of FDI has significantly increased from 198.13 (Rs. Crore) in 2000-2001 to 25, 106, 78 (Rs. Crore) in 2013-2014. However, the share of FPI in total FDI varies in certain years i.e. 0.88 percent in 2010-2011 to 0.48 per cent in 2011-2012 to 1.79 per cent in 2012-2013. This share has increased to 16.39 per cent in the recent 2013-2014 year period. This surely indicates that the government is trying to develop the country as a food processing hub, which is likely to boost the Indian food processing sector because FDI is the major instrument which serves as a link between investment and saving and ensures the catalyst for the development of the economy particularly a country like India.

Growth of exports of processed food from FPI Sector of India

Going through the literature on the Indian food processing industry it was observed that the demand of the Indian processed food products are increasing in the international market. Indian exporters are interested to increase their export share in the developed country market. India can become one of the leading exporters of the processed food products among developing countries and thus can increase its export share in the international trade. India's geographical situation gives it the unique advantage of

connectivity to Europe, the Middle East, Japan, Singapore, Thailand, Malaysia and Korea. Indian processed fruit and vegetable products have considerable export potentials and if it is properly utilized, growers, processors, traders as well as national economy will benefit (Kachru, 2010).

According to Kalia, (2003) if India wants to be the largest food-processing industry as it contemplates it has still miles to go. Our productivity and the capacity utilization in food processing industries are at low levels in comparison to the other Asian Countries. The food-processing industry is one of the leading sectors in the manufacturing sector, which can reach high level of development and become export competitive if we improve our value addition up to certain extent.

This value addition in the food processing industry in India was only 7% to total food production as compared to 23% in China and 45% in Philippines and 88% in UK in the year of 1991. Indian food industry is characterized by the small and unorganized sector that accounts for 75% of the total industry (Baisya, 2004). The Government has identified processed foods including fruits, fresh juices and vegetables as one of the thrust sectors for special export efforts. This section analyses the export trends of principal commodities from FPI sector. The period taken for this study is 2006-07 to 2012-13, that is 8 years. The growth rates have been calculated for the period 2011-12 and 2012-13. Percentage share of FPI in exports, growth of exports from FPI and growth of total exports has also been calculated.

Table 4: Total Export from FPI Sector Principal Commodities wise (From 2006-07 to 2012-13)

Sr. No	COMMODITY	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13 (US \$ Million)	2012-13 (Growth)
1	GUARGUM MEAL	248.58	279.98	294.18	240.70	646.08	3,354.82	3,919.23	16.8
2		618.67	1,081.71	2,071.42	2,289.35	2,493.92	3,217.00	3,560.58	10.7
3	MARINE PRODUCTS	1,767.42	1,722.77	1,534.46	2,095.28	2,622.72	3,443.66	3,462.28	0.5
4	MEAT & PREPARATIONS	733.40	932.46	1,173.34	1,332.53	1,971.08	2,921.42	3,291.92	12.7
5	OIL MEALS	1,225.79	2,037.76	2,251.63	1,658.83	2,437.90	2,420.46	2,938.53	21.4
6	SPICES	699.26	1,044.75	1,391.62	1,301.60	1,768.08	2,750.09	2,814.42	2.3
7	RICE(OTHER THAN BASMATI)	938.17	1,845.00	382.67	76.38	50.86	1,723.38	2,647.59	53.6
8	WHEAT	7.74	0.06	0.30	0.01	0.15	202.07	1,934.17	857.2
9	SUGAR	690.19	1,344.99	1,038.20	23.20	1,198.92	1,838.55	1,574.67	-14.4
10	OTHER CEREALS	132.81	755.23	890.23	625.71	803.61	1,127.98	1,502.82	33.2
11	MISC PROCESSED ITEMS	248.88	338.53	454.31	442.36	577.42	795.89	911.62	14.5
12	COFFEE	435.44	464.24	496.34	429.74	661.77	952.91	866.39	-9.1
13	TEA	433.73	507.00	585.42	623.29	736.45	847.65	865.96	2.2
14	CASTOR OIL	240.96	317.32	481.75	461.63	654.00	971.85	792.82	-18.4
15	GROUNDNUT	176.73	263.51	276.14	302.42	480.45	1,093.05	747.41	-31.6
16	CASHEW	550.47	549.27	639.28	591.35	619.23	915.24	746.97	-18.4
17	FRESH FRUITS	313.63	359.06	424.28	479.55	478.63	528.60	607.32	14.9
18	FRESH VEGETABLES	342.73	367.84	527.25	621.82	559.53	600.34	570.65	-4.9
19	SESAME SEEDS	208.86	411.23	333.39	316.51	507.25	553.13	528.08	-4.5
20	PROCESSED FRUITS & JUICES	157.20	192.27	238.44	245.04	228.64	343.58	361.81	5.3

21	SPIRIT & BEVERAGES	60.04	85.94	120.24	129.05	186.46	308.56	360.07	16.7
22	DAIRY PRODUCTS	110.48	241.28	255.90	117.44	187.14	128.55	325.72	153.4
23	PULSES	170.41	130.63	117.68	86.75	190.52	227.58	235.45	3.5
24	PROCESSED VEGETABLES	143.61	149.03	154.47	158.68	167.88	222.02	205.80	-7.3
25	POULTRY PRODUCTS	69.82	106.96	90.71	77.36	62.35	80.25	84.79	5.7
26	SHELLAC	32.57	30.80	22.92	15.12	30.81	53.09	73.84	39.1

Sr. No	COMMODITY	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13 (US \$ Million)	2012-13 (Growth)
27	FRUITS / VEGETABLE SEEDS	26.97	35.26	26.17	30.57	40.52	60.09	63.70	6.0
28	MOLLASES	29.52	62.19	18.51	4.12	47.01	42.78	40.82	-4.6
29	NIGER SEEDS	14.79	22.40	14.49	5.10	9.85	24.83	16.55	-33.3
30	CASHEW NUT SHELL LIQUID	3.41	6.23	6.54	5.85	7.45	12.40	5.50	-55.7
	Export by FPI (in US \$ Million)	10,832	15,686	16,312	14,787	20,427	31,762	36,057	13.5
	Total Export (US \$) Million		163,132	185,295	178,751	251,136	305,964	300,274	
	% Share of FPI		9.6	8.8	8.3	8.1	10.4	12.0	
	Growth Rate of FPI (%)		44.8	4.0	-9.3	38.1	55.5	13.5	
	Growth of Total Export			13.59	-3.53	40.49	21.83	-1.86	

Source: DGCIS, Kolkata, P: Provisional Results.

Source: DGCI, Kolkata, P: Provisional Results.

Table 4 indicates the total exports from FPI sector from the period 2006-07 to 2012-13. The exports of principal commodities such as marine products, sugar, oil meals has shown a significant rise in the last decade, however growth of export of sugar, groundnuts, coffee, sesame seeds and processed vegetables has shown negative trends in 2012-2013. But, the overall exports by FPI has risen from Rs.10, 832 (US \$ Million) in year 2006-07 to Rs.36, 057 (US \$ Million) in year 2012-13. Also the percentage share of FPI sector has also increased from 9.6 percent in 2006-07 to 12.0 per cent in year 2012-13. Thus, Indian food market provides a big market for their products which shows that this sector has a large potential for exportable commodities.

Conclusion and Policy Implications

The paper clearly indicates that a growing industrial sector is crucial to greater economic development and particularly in an emerging country like India, where growth with equity is a primary policy thrust, the optimum development of food processing sector will contribute significantly in tackling several developmental concerns such as prevention of wastage of food, the improved nutrition etc. by serving as a bridge between agriculture and industry. On the basis of the study, the findings and conclusion of this paper is that food processing industry is of enormous significance for India's development. This sector has synergized the development process and promoted the growth of the nation to a great extent. Indian food market now provides a big market for their products. FDI has also played a major role in the transformation and development of India's food processing industry.

The food processing sector of India has continuously recorded high growth rates in its contribution towards GDP and economic development of the country. Table 2 clearly shows the increasing growth of food processing sector and its contribution to the GDP of India. The GDP at factor cost of agriculture, manufacturing and FPI (Food Processing Industries) consistently increased in all years from 2004-05 to 2011-12. By a favorable policy environment and demand push impact of a young consuming class with growing disposable incomes, India offers significant investment opportunities in the food business sector and thus has become an attractive destination for investments by the foreign investors.

Though there are many promising dynamics in this sector which support the good growth of food processing industry in India by providing opportunities for large foreign investments in the food processing technologies, frozen food, packaging etc. Table 3 indicates the inflow of Foreign Direct Investment (FDI) in food processing sector. The inflow of FDI has significantly increased from 198.13 (Rs.

Cre) in 2000-2001 to 25, 106, 78 (Rs. Cre) in 2013-2014. However, the share of FPI in total FDI varies in certain years i.e. 0.88 percent in 2010-2011 to 0.48 per cent in 2011-2012 to 1.79 per cent in 2012-2013. This share has increased to 16.39 per cent in the recent 2013-2014 year period. At the same time, though India is a key producer of food products, having an adequate production base for inputs, productivity levels are very low in the country. Also there are number of complex regulations and cumbersome procedures that make investments unviable and affects the entire supply chain which have not allowed this sector to reach its full potential. The challenges for the food processing sector are diverse and demanding, and need to be addressed on several fronts to derive maximum market benefits.

This sector also has a large potential for exportable commodities. Table 4 shows the overall exports by FPI has risen from Rs.10, 832 (US \$ Million) in year 2006-07 to Rs.36, 057 (US \$ Million) in year 2012-13. Also the percentage share of FPI sector has also increased from 9.6 percent in 2006-07 to 12.0 per cent in year 2012-13. In spite of these all growth impacts of food processing industry of India, the government must address some significant constraints such as exploration of untapped potentials of industry, value-addition in un-processed categories of food must be raised for the domestic and international demand, investment in supply chain in order to improve costs, tighten supplies and minimize waste must be adopted and thus the focus towards food processing industry as a priority sector must ensure policies to support investment in this sector and attract more FDI inflows. Thus, the India should continuously strive to be a competitive, efficient and attractive investment destination through appropriate policy initiatives.

References:

- Asha (2013), "Emerging sectors of Indian Economy", *Global Journal of Management and Business Studies*, Vol. 3, No: 5, pp. 491-196.
- Athukorala, P.C. and Sen, K. (1998), "Processed Food Exports from Developing Countries: Patterns and Determinants", (Mimeo).
- Baisya, R. K. (2004), "Changing Face of Processed Food Industry in India Recent Acquisitions in Indian Food Industry", *Processed Food Industry, February*.
- Behera, S.R. (2009), "FDI and Export competitiveness: An Analysis of Food Processing Industry of India", *AIUB Journal of Business and Economics (AJBE)*, Vol. 8, No. 2, pp.: 1-22.
- Desai, Vasant (2003), "Small scale Industry and Entrepreneurship", Himalaya Publishing House, New Delhi.

- FICCI (2007), “A report on Processed Food and Agribusiness: Opportunities for investment in India”, Mumbai, India.
- FICCI (2010), “Bottlenecks in Indian Food Processing Industry”, Mumbai, India.
- Ghosh, N., Bhandari, B.S. and Sharma, S. (2013), “The extent of Agricultural Products: Towards Creating a Statistical database in India”, *The Journal of Industrial Statistics*, Vol. 2, No. I, pp.: 24-36.
- Gola. K. L., Dharwal. M., Agarwal. A. (2013), “Role of Foreign Direct Investment in the development of Indian economy”, GYAN PRATHA-ACCMAN *Journal of Management*, Vol. 5, Issue 1.
- Gopinath, M. (2000), “Foreign Direct Investment in Food and Agricultural Sectors”, (available at <http://oregonstate.edu/dept/IIFET/2000/papers/gopinath.pdf>).
- Government of India, Ministry of Food Processing Industries (2011), “Strategic Plans for Food Processing Industry in India”.
- Kachru, R.P. (2006), “Agro-processing Industries in India-Growth, Status and prospects”, Indian Council of Agriculture Research, New Delhi.
- Kalia, M. (2003), “WTO – A Bane or Boom for India”, *Processed Food Industry*.
- Merchant A (2008), “India-Food Processing Industry”, OSEC Business Network, New Delhi, India.
- Ministry of Food Processing Industries (2012), “Data Bank on Economic Parameters of the Food Processing Sector”, New Delhi.
- http://mofpi.nic.in/images/File/Databank_SectoralDatabas eFPIs_140212.pdf.
- Puri, R. and Tajinder (1987), “Nutritive value and consumption pattern of some processed foods”, *Indian Food Packer*, Vol. 43, No. 5, pp. 49-53.
- Rastogi. R and Sawhney. A (2013), “What attracts FDI in Indian Manufacturing Industries?” Discussion Paper 13-02, July, Centre for International Trade and Development, School of International Studies, JNU, India.
- Ravi, C and D Roy (2006), “Consumption pattern and food demand projections: A regional analysis”, Paper presented at the workshop 'From Plate to Plough: Agricultural diversification and its implications for smallholders, International Food Policy Research Institute, Washington DC and Institute of Economic Growth New Delhi, September 20-21.
- Saravan, S. and Mohansundaram, V. (2013), “An Analysis of FDI in Indian Food Processing Industry”, *Indian Journal of Applied Research*, Vol. 3, Issue 3, March, pp. 80-81.
- Sarkar, S. and A. K. Karan (2005), “Status and Potentials of village agro-processing units/industries”, Occasional paper 37, National Bank for Agriculture and Rural Development, Mumbai.

Other Important Sources for Data relating to food processing industries

<http://dipp.nic.in>

<http://mospi.nic.in>

www.apeda.gov.in

<http://rbi.org.in>

www.fao.org

<http://agricoop.nic.in>